

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
20 October 2005 (20.10.2005)

PCT

(10) International Publication Number  
WO 2005/096818 A1

(51) International Patent Classification<sup>7</sup>: A01N 43/54,  
C07D 239/52, A01N 43/60, C07D 251/20

Tochigi 323-0022 (JP). NAKAMURA, Shin [JP/JP];  
4-4-8, Joto, Oyama-shi, Tochigi 323-0807 (JP).

(21) International Application Number:  
PCT/EP2005/002952

(74) Agent: SCHWENK, Norbert; c/o Bayer CropScience  
GmbH Law and Patents, Building K 607, 65926 Frankfurt  
(DE).

(22) International Filing Date: 19 March 2005 (19.03.2005)

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,  
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,  
ZM, ZW.

(25) Filing Language: English

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

(26) Publication Language: English

Published:

— with international search report

(30) Priority Data:  
2004-109197 1 April 2004 (01.04.2004) JP  
2004-214777 22 July 2004 (22.07.2004) JP  
2004-355616 8 December 2004 (08.12.2004) JP

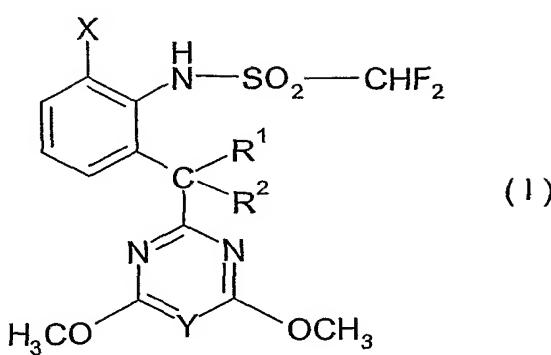
(71) Applicant (for all designated States except US): BAYER CROPSCIENCE AG [DE/DE]; Alfred-Nobel-Str. 50,  
40789 Monheim (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): ARAKI, Koichi [JP/JP]; 2-4-39, Kamiya, Ushiku-shi, Ibaraki 300-1216 (JP). KUDO, Sachio [JP/JP]; 3-8-17, Kasuga, Tsukuba-shi, Ibaraki 305-0821 (JP). SATO, Yoshitaka [JP/JP]; 1-8-12, Hanahata, Tsukuba-shi, Ibaraki 300-3261 (JP). ENDO, Keiji [JP/JP]; 4233-4, Ami, Ami-machi, Inashiki-gun, Ibaraki 300-0331 (JP). SHIRAKURA, Shinichi [JP/JP]; 2-6-3, Ekihigashidouri, Oyama-shi,

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DIFLUOROMETHANESULFONYL ANILIDE DERIVATIVES USEFUL AS HERBICIDES



(57) Abstract: Novel difluoromethanesulfonamide derivatives of the formula (I) Difluoromethanesulfonamide derivatives represented by the formula wherein X represents halogen, Y represents CH or N, R<sup>1</sup> represents hydrogen, and R<sup>2</sup> represents hydrogen or hydroxy, or R<sup>1</sup> and R<sup>2</sup> together may form C&equals;O with the carbon atom to which they are bonded, and their use as herbicide for paddy field weeds.